

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

Claims:

3. (Currently Thrice Amended) A process for making hose comprising the steps
of:

pressurizing an extruded rubber hose;

5 trapping air inside said hose by sealing engagement of said hose with a mandrel
and by sealing engagement of said hose with pinch rollers; and,
vulcanizing said hose from the outside to the inside using a non-contact energy
source.

9. (Amended) A process for making hose comprising the steps of:

10 pressurizing an extruded rubber hose includes by supplying air to and through a
check valve in a mandrel and into a cavity formed by said check valve, said mandrel, said
hose and pinch rollers;

trapping air inside said hose; and,

vulcanizing said hose from the outside to the inside using a non-contact energy

15 source.

11. (Amended) A process for making extruded rubber hose comprising the steps
of:

extruding rubber hose over a mandrel such that said rubber hose forms a seal as
said hose exits said mandrel;

20 tensioning and sealing said rubber hose as it is drawn through pinch rollers by a
haul-off; and,

vulcanizing, utilizing a non-contact heater, said hose intermediate said mandrel and said pinch rollers.

12. A process for making an extruded rubber hose as claimed in claim 11 wherein said vulcanization occurs at a temperature of between 220°F - 350°F.

5 13. (Amended) A process for making an extruded rubber hose as claimed in claim 11 wherein said vulcanizing is performed by a non-contact steam tube.

17. (Amended) A process for making hose comprising the steps of:
extruding rubber onto, into and through a woven fabric forming an unvulcanized rubber hose;

10 pressurizing said unvulcanized rubber hose with a gas;
sealing the inside of said rubber hose with respect to a mandrel;
pulling the unvulcanized rubber hose through a non-contact heater vulcanizing said rubber hose; and,

pinching and sealing said vulcanized hose as it is removed from said heater.

15 18. A process for making hose as claimed in claim 17 wherein the step of pressurizing said unvulcanized rubber hose with a gas includes intermittently supplying gas under pressure through a gas supply cup to said inside of said rubber hose.

19. A process for making hose as claimed in claim 18 wherein the step of pressurizing said unvulcanized rubber hose includes intermittently supplying gas under
20 pressure through a gas supply cup, into and through a tube interconnected with said mandrel, and into and through a check valve and into said inside of said rubber hose.

20. A process for making hose as claimed in claim 19 further comprising the step of measuring the outside diameter of the vulcanized rubber hose and varying the frequency of said intermittent supply of gas to said inside of said rubber hose in response to said measurement of outside diameter of said hose.

5 25. A process for making hose comprising the steps of:
feeding woven cloth over a tube and a mandrel;
supplying gas through said woven cloth, into said tube, and through said mandrel;
extruding rubber onto, into and through a woven fabric forming an unvulcanized
rubber hose;
10 pressurizing said unvulcanized rubber hose with said gas;
sealing the inside of said hose with respect to said mandrel;
pulling said unvulcanized rubber hose through a heater vulcanizing said rubber
hose; and,
sealing said rubber hose as it is removed from said heater.

15 26. A process for making hose as claimed in claim 25 further comprising the step of measuring the outside diameter of said hose upon exit from said heater.

27. A process for making hose as claimed in claim 26 wherein said step of supplying gas through said woven cloth and into said tube is performed intermittently at a frequency necessary to insure the correct diametrical dimensions of said hose.

20 28. A process for making hose as claimed in claim 27 wherein said frequency of supplying air through said woven jacket is increased when said outside diameter is too

small and said frequency of supply air is decreased when said outside diameter is too large.

29. A process for making hose as claimed in claim 26 wherein a check valve is included in said mandrel and pinch rollers seal said unvulcanized hose as it is removed
5 from said heater.

30. (Amended) A process as claimed in claim 26 wherein said heater may be selected from the group consisting of a steam heater, an infrared heater, an electric coil, and a hot air heater.

33. (Amended) A process for continuously vulcanizing hose comprising the steps
10 of:

pressurizing said hose with gas under pressure through a check valve located in a mandrel;

vulcanizing said hose from outside-in using a non-contact energy source.

34. A process for continuously vulcanizing hose as claimed in claim 33 wherein
15 said step of pressurizing said hose includes sealing said hose about said mandrel and between pinch rollers.

35. (Currently Thrice Amended) A process for continuously vulcanizing hose as claimed in claim 33 wherein said step of vulcanizing said hose from outside-in is performed by a heater selected from the group of a steam heater, an electric coil, a radiant
20 heater, and, an infrared heater, ~~and a hot air heater~~.

36. (Amended) A process for continuously vulcanizing hose as claimed in claim

33 further comprising the steps of controlling the diameter of said hose.